## BULLETIN

OF THE

#### BROOKLYN ENTOMOLOGICAL SOCIETY

Vol. XXIX

APRIL, 1934

No. 2

# NEW WEST INDIAN AND CENTRAL AMERICAN CHRYSOMELIDAE.

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The following notes have been made for the most part in connection with the determination of some Cuban Chrysomelidae sent me by Mr. S. C. Bruner, of Santiago de las Vegas. In addition four new Mexican and Central American species of *Galerucella* have been described which are related to *G. fuscomaculata* Jacoby and at least one of which was included by Jacoby in that species as originally described. The writer is indebted to K. G. Blair and G. E. Bryant, of the British Museum, for comparing type material.

Galerucella fuscomaculata Jacoby. Fig. 1, pl. IV.

Galerucella fuscomaculata Jacoby, Biologia Centrali-Americana, vol. 6, pt. 1, p. 491, 1886; vol. 6, Supplement, table 28, fig. 2.

Elongate oblong, about 4 mm. long, densely punctate and covered with short, thick, and closely appressed pubescence; dull pale brown with darker markings, often a spot on occiput, irregular darkening in lateral and median depressions on prothorax, and vittate sutural, median, and lateral elytral infuscations. Head densely but shallowly punctate over occiput, and covered with short pubescence; a deep, impressed, median, vertical line extending from occiput to interantennal area, a slight depression running from above antennal socket along inner side of eye, and between this and the median line a somewhat swollen boss on each side of upper vertex; pale brown, with region about median line on occiput frequently darker. Antennae short, not reaching much behind humeri, third joint longest, fourth and following joints of approximately equal length, gradually thickening; brownish. Prothorax scarcely twice as wide as long, with slightly arcuate sides and obliquely truncate basal angles; widely depressed on sides and with a shallow median depression; surface densely and finely punctate and covered with short pubescence; dull yellow, usually with a darker median and lateral spots. Elytra oblong, with narrow lateral margin and prominent humeri; a basal callosity near scutellum; densely and more coarsely punctate than prothorax and covered with dense, closely appressed pubescence; dull yellow brown, with darker brown markings on humeri, an interrupted subsutural vitta widening in middle and toward apex, a median interrupted vitta, and a lateral darkening extending from humerus nearly to apex, these frequently evanescent in pale specimens. Body beneath shining under pale pubescence, more or less darkened, in dark specimens entirely dark; in pale specimens with metasternum somewhat darker; legs pale. Claws in female with shorter basal tooth than in male. Length 3.5 to 5 mm., width 1.6 to 2.3 mm.

Distribution: Mexico (Cerro de Plumas; figured specimen in British Museum, not examined by the writer); Guatemala (Champerico; Zapote; Cacao Trece Aguas, Alta Vera Paz); Nicaragua (Chinandega, Managua, San Marcos); Salvador (Acajutla); Canal Zone (Paraiso). (All these localities are represented by specimens in the National Museum, except Cerro de Plumas.)

Jacoby, in describing *G. fuscomaculata*, stated that he had specimens from Mexico to Panama which showed considerable variation in size and color. In the Biologia material in the United States National Museum labelled *G. fuscomaculata* there are two species, one from Zapote, Guatemala, the other from David, Chiriqui. K. G. Blair, of the British Museum, has compared the specimen from Cerro de Plumas figured by Jacoby in the Biologia with a specimen from Champerico, Guatemala, sent by the writer, and states that the one from Champerico and the Zapote specimen in the British Museum, presumably of the same lot as the Biologia specimen in the National Museum, agree with the specimen figured. He suggests that it would be better to consider the figured specimen the type rather than the one labelled *fuscomaculata* by Jacoby, which is from Rio Hondo, British Honduras, and which he thinks may be a different species.

### Galerucella brevicollis, new species. Fig. 4, pl. IV.

Broadly oblong, about 4.5 mm. long with short, wide prothorax, and oblong elytra broadly rounded at apex; densely punctate and covered with short pubescence; dull pale brown, with darker markings in depressions on prothorax and interrupted subsutural, median, and lateral vittate elytral markings. Head densely punctate and pubescent over occiput, with a median depressed vertical

line extending to between antennal sockets; brown, sometimes with darker occipital infuscation. Antennae slender, extending to considerably behind humeri but not nearly to middle of elytra, third joint long; brown, with paler basal joints. Prothorax considerably more than twice as wide as long, with rounded sides and slightly obliquely truncate basal angles; lateral and median depressions; surface finely and densely punctate, and finely pubescent; pale brown, with lateral and sometimes median infuscation. Elytra broadly oblong, little depressed, with broad apex and narrow lateral margin; humeri prominent, with a short intrahumeral sulcus; surface densely and somewhat coarsely and deeply punctate, covered with short pubescence; pale brown, with darker brown subsutural, median, and lateral interrupted and not clearly defined vittae. Body beneath shining under the short, pale pubescence; brown, with darker shadings on metasternum; legs pale; claws toothed in both sexes. Length 4.3 to 5 mm.; width 2 to 2.5 mm.

Type, male, and one paratype, female, U. S. N. M. Cat. No.

44028. Other paratypes in the British Museum.

Type locality.—David, Chiriqui, Panama, collected by G. C. Champion.

Distribution.—Panama (David); Costa Rica (Piedras Negras);

Nicaragua (Chinandega).

This is one of the two species in the Biologia material in the National Museum labelled *G. fuscomaculata* Jacoby. It differs from *G. fuscomaculata*, as here interpreted, by having a shorter and broader prothorax, wider and more deeply punctate elytra, and a quite differently shaped aedeagus. In its short, wide prothorax and broad elytra it resembles *G. marmorata* Jacoby rather than *G. fuscomaculata*, but it is a smaller and less densely pubescent species with different elytral markings and entirely differently shaped aedeagus.

Galerucella cyclopea, new species. Fig. 2, pl. IV.

Elongate oblong, about 4 mm. long, densely punctate, and finely and densely pubescent; head with a deep pit in middle of front; pale brown, with darker occipital spot, dark spots in lateral and median depressions on prothorax, and dark vittate subsutural, median, and lateral elytral markings. Head densely punctate and pubescent over occiput, with an impressed, median, vertical line; in middle of front above frontal tubercles a deep round hole; antennal sockets very close together; yellow brown, often with darker area along median line. Antennae brown, with paler basal joints, not extending much behind humeri; third joint longer than the succeeding ones, which gradually thicken. Prothorax not twice as wide as long, with rounded sides, obliquely truncate basal angles,

and wide lateral and median depressions; finely punctate and covered with short, appressed pubescence; pale brown, with darker lateral and median spots. Elytra oblong oval, with narrow lateral margin, well marked humeri, and intrahumeral sulcus; densely punctate and covered with dense pubescence; pale yellow brown, with darker subsutural infuscations and traces of median and lateral vittae. Body beneath shining under the fine, pale pubescence, brown, with darker metasternum; legs pale. Claws in male toothed. Female unknown. Length 4.2 nm., width 1.8 to 2 mm.

Type, male, and three paratypes, male, U. S. N. M. Cat. No.

44321.

Type locality.—Paraiso, Canal Zone, Panama, collected 27 April, 1911, by E. A. Schwarz.

Other localities.—Cacao Trece Aguas, Alta Vera Paz, Guatemala, collected by E. A. Schwarz and H. S. Barber.

This species, closely resembling *G. fuscomaculata*, and having a similar aedeagus, is slightly larger and has more closely placed antennae. It is at once distinguished from *G. fuscomaculata* and all related species by the striking pit in the front of the head.

### Galerucella orthodera, new species. Fig. 3, pl. IV.

Elongate oblong, about 4 mm. long, head unusually broad, prothorax broad at apex and slightly constricted near base, with prominent nodule at basal angle; elytra with broadly rounded apex; densely punctate and pubescent; pale brown, with darker infuscations on occiput, in depressions in the middle and on either side of prothorax, and dark submarginal, median, and lateral vittate markings on elytra. Head broad, with antennal sockets widely separated; a median, impressed, vertical line from occiput to interantennal area, well defined tubercles, and a slight depression near inner side of eye; between this and the median depression a callosity on each side of vertex; densely punctate and pubescent over occiput. Antennae slender, not quite reaching back to middle of elytra, third joint longer than succeeding ones, which gradually thicken; brownish, with paler basal joints. Prothorax about twice as wide as long, broad at apex, constricted near base, with prominent nodule at basal angle; depressed on sides and in middle. densely punctate, and covered with short, appressed pubescence: darker markings in depressions. Elytra oblong, with narrow lateral margin, broadly rounded at apex and with prominent humeri and a callosity on each elytron near scutellum; densely punctate and densely pubescent; pale yellow brown, with darker subsutural, median, and lateral vittate markings. Body beneath shining under pale pubescence; brown, sometimes with metasternum darker;

claws in both sexes with short basal tooth. Length 3.5 to 4 mm., width 1.5 to 1.8 mm.

Type, male, and 3 paratypes, one male and two females, U. S. N. M. Cat. No. 44322.

Type locality.—Ancon, Canal Zone, Panama, collected 5 April,

1911, by E. A. Schwarz and A. H. Jennings.

This species is distinguished by its broad head, its long antennae, the basal sockets of which are widely separated, and by the fact that the prothorax is not narrowed apically but is constricted near the base. The aedeagus is quite unlike that of *G. fuscomaculata* or that of *G. cyclopea*.

Galerucella pauperata, new species. Fig. 5, pl. IV.

Slender, elongate oblong, about 4 mm. long, densely punctate and covered with short pubescence; pale yellow brown, with darker markings frequently on occiput and in lateral and median pronotal depressions, and traces of vittate subsutural, median, and lateral elytral infuscations. Head densely punctate and pubescent over occiput, with an impressed median vertical line and a depression running from above antennal sockets along inner side of eye; antennal sockets close together; head brownish, with darker area frequently along median line on occiput. Antennae extending considerably behind the humeri but not nearly to middle of elytra, third joint longer than succeeding ones, which are approximately of equal length and gradually thicken; brownish, with paler basal joints. Prothorax scarcely twice as wide as long, with arcuate sides and somewhat obliquely truncate basal angles; depressed on sides and in middle, densely punctate, and covered with short, closely appressed pubescence; pale brown, with darker infuscations in depressions. Elytra narrowly oblong, with a narrow lateral margin and well marked humeri; a basal callosity near scutellum; densely and distinctly punctate and covered with fine pubescence; pale yellow brown with traces of subsutural, median, and lateral darker vittae. Body beneath shining under pubescence; pale, usually with darker metasternum; legs pale; claws in both sexes toothed. Length 3 to 4.3 mm.; width 1.3 to 2 mm.

Type, male, with three paratypes, U. S. N. M. Cat. No. 44323. Type locality.—Cordoba, Vera Cruz, Mexico, collected in April,

1908, by A. Fenyes.

This species is closely related to *G. fuscomaculata* Jacoby, but is more slender and elongate, and has a smaller prothorax and narrower head.

Galerucella oteroi, new species. Fig. 6, pl. IV.

Oblong oval, about 5.5 mm. long, not shining, densely punctate and pubescent, the prothorax short, the elytra elongate and consid-

erably wider than the prothorax; pale yellowish brown, with darker occipital spot, four black spots in a row across pronotum, elytra with dark grayish brown vittae, the paler and narrower intervening vittae being somewhat raised, and the two pale humeral vittae so closely placed as to be almost merged. Head densely punctate above, with short, closely appressed pubescence; an impressed median line down occiput to tubercles, the latter well defined; interantennal area flat, not produced, antennae well separated; region about median line and labrum dark. Antennae not quite reaching back to middle of elytra, first and third joints longer than remainder; first seven joints pale, with darker apex, the remainder entirely dark. Prothorax more than twice as wide as long, with rounded sides and small apical and basal nodules; deeply depressed on the sides and somewhat in the middle; surface densely and rugosely punctate, with short, fine, inconspicuous pubescence; pale brownish, with four black spots in a row slightly before the middle. Scutellum rounded at apex. Elytra elongate, with parallel sides, considerably broader than prothorax; humeri well developed; surface densely punctate, with short, fine, but dense, pubescence; the sutural edges and narrow pale vittae raised; a pale median vitta, two humeral vittae closely placed and at some points merged, the inner one beginning at base of elytra and ending at apical angle, the outer one beginning at humerus and at apex curving about to join the median vitta, a lateral vitta arising also at humerus and ending before apex, the lateral margin and apex also pale. Body beneath finely pubescent, pale, with darker shadings on metasternum and abdominal segments; legs pale, with dark anterior coxae and a dark median and an apical spot on femora and tibiae and darkened apices to tarsal joints. Length 5.2 to 5.8 mm., width 2.6 to 2.8 mm.

Type, male, and one paratype, female, U. S. N. M. Cat. No. 44324.

Type locality.—Buenos Aires, Trinidad Mts., Cuba, collected in

May, 1932, by A. R. Otero, S. C. Bruner, and J. Acuña.

Galerucella oteroi is one of the largest of several closely related West Indian Galerucellas, and is distinguished by its four-spotted pronotum and pale-lined elytra with two nearly united pale humeral vittae. Two related species have been described from Cuba. G. venustula Suffrian is smaller, being not more than 4 mm. long, lacks pronotal spots, and has fewer elytral vittae. G. maculipes Blake is of approximately the same size, but has a more spotted pronotum, transverse elytral impressions, and wider pale vittae. The aedeagus is also different. Three related species of Galerucella have been described from Porto Rico. G. obliterata Olivier has fewer elytral vittae. G. walcotti Bryant and G. varicornis Weise

are smaller, are without pronotal spots, and have transverse elytral impressions and fewer vittae.

Disonycha laevigata Jacoby. Fig. 11, pl. IV.

Disonycha laevigata Jacoby, described from the island of Grenada, British West Indies, and recently assuming economic importance in Porto Rico as a garden pest of beet and chard, is also represented in the National Museum collection from Jamaica (Chapelton, Spanishtown, Kingston), Haiti (Rio Froide, Bayeux), Dominican Republic (Macoris R., San Cristobal), Panama (Alhajuela, Ancon, Bohio, Chagres R., Corozal, Gamboa, Gatun, Juan Mina Plantation, La Sabanas, Panama City, Miraflores, Old Panama, Summit), and Costa Rica (Port Limon). In the Bowditch collection at the Museum of Comparative Zoology are specimens from Venezuela ("L. Laglaize") and Colombia (Puerto Colombia, Atlantico). Its occurrence in South and Central America, which has not been previously reported, has led the writer to suspect that this may be the species described by Harold<sup>2</sup> as Disonycha eximia from New Grenada (Calamar, Magdalena River, northern Colombia). From Harold's description, no distinction can be drawn between D. laevigata and D. eximia.

Argopistes coccinelloides (Suffrian). Fig. 8, pl. IV.

Argopus coccinelloides Suffrian, Archiv. f. Naturgesch., vol. 34, p. 223, 1868.

Sophraena coccinelloides Harold, Deutsch. Ent. Ztschr., vol. 21, p. 138, 1877.

A. R. Otero has recently reared at Santiago de las Vegas, Cuba, from larvae mining the leaves of Foresticra rhamnifolia, this second known American species of Argopistes. Suffrian's detailed description of Argopus coccinelloides entirely fits these Cuban specimens. In referring the species to the European and Asiatic genus Argopus, Suffrian stated that he was doubtful whether this beetle belonged to that genus. Harold, from Suffrian's description, referred the species to Sophraena (described by Baly,<sup>3</sup> not by Clark, as stated by Harold). The species of Sophraena are more oval than those of Argopistes, and only moderately convex. G. E. Bryant, of the British Museum, to whom I have sent specimens of A. coccinelloides, states that "it is correctly placed in this genus (Argopistes), and has nothing to do with Sophraena." Baly<sup>4</sup> in

<sup>4</sup> Baly, Trans. Ent. Soc. London, p. 202, 1874.

<sup>&</sup>lt;sup>1</sup> Jacoby, Trans. Ent. Soc. London, pt. 3, p. 262, 1897. <sup>2</sup> Harold, Coleopt. Hefte, vol. 15, p. 6, 1876.

<sup>&</sup>lt;sup>3</sup> Baly, Trans. Ent. Soc. London, third series, vol. 2, pt. 4, p. 342, 1865.

1874 described a species of Argopistes from Japan which he named *Argopistes coccinelloides*. Suffrian's earlier use of the same specific name requires that Baly's species be given another name.

The Cuban species is closely related to A. scyrtoides Lec. (Fig. 7) of Florida, which has been recorded as a leaf miner of Forestiera porulosa.<sup>5</sup> As in the Florida species, the coloring of A. coccinelloides is somewhat variable, but no specimens have been examined showing the red elytral spots typical of the Florida species. The apical joints of the antennae are dark, which is not true of the Florida species, and the aedeagus is slightly shorter, more slender, and with a somewhat differently shaped tip. Usually the elytra are reddish brown, with the apical half dark, and the head at the base and prothorax are dark. The antennae are yellow, the last three or four joints in the male, and the last one or two joints in the female, dark. The structure of the hind legs of the American species of Argopistes has not been adequately described (see figures). The legs are short and the femora are grooved on the inner side. The tibiae are about the same length as the tarsi, are shallowly grooved, and have a sheath-like prolongation; they are serrate on the inner side, end acutely, and enclose a broad but acutely pointed spur. This spur arises from the point where the tarsal joint originates, and projects slightly beyond the tibial sheath, making with the acutely pointed end of the sheath two points, from the outside resembling two spurs. The first joint of the anterior tarsi in the male is enlarged, and the first joint of the posterior tarsi is longer than in the anterior and middle pairs.

Mr. Otero made the following observations regarding the habits

of the larvae of this species:

"Leaf miner on Forestiera rhamnifolia Gris., known locally as the 'Hueso blanco.' April 15: It was observed that the insect entered the leaf through the base, near the petiole. From this point it worked almost entirely around the border of the leaf, then turned backwards and continued the gallery in a direction more or less parallel to the first section. The larva is somewhat flattened, yellow or pale orange in color, with the head yellowish brown and the prothorax fuscous above; legs blackish. The plant was badly injured. April 25: Ten larvae emerged from the leaves placed under observation in the laboratory, and transformed to pupae, each constructing a small uncovered cell in the soil, just large enough to accommodate its body, where they remain until transformation takes place. (Larvae and pupae preserved in alcohol.)

<sup>&</sup>lt;sup>5</sup> Dyar, Proc. Ent. Soc. Wash., vol. 5, p. 137, 1905, and Blatchley, Florida Entomologist, vol. 8, p. 19, 1924.

May 5: Two adults emerged, and four more the following day. Adults were collected in the field while they were eating the leaves

of the same host plant."

Bryant<sup>6</sup> has described two species of *Argopistes* from South Africa that are leaf miners of olive trees. The only two American species whose food plants are known feed on species of *Forestiera*, a genus which also belongs to the family Oleaceae.

Argopistes rubicundus, new species. Fig. 10, pl. IV.

Rounded, convex, shining, finely punctate, deep reddish brown above, the anterior and middle legs, posterior tarsi, and antennae slightly paler yellowish brown. Head withdrawn into the prothorax so as to be nearly hidden from above, eyes large, close together, vertex indistinctly punctate, a larger fovea on each side near eye, lower front somewhat retracted. Antennae at base closely placed, extending a little beyond humeri, third joint very short and slender, remainder slightly longer, of approximately equal length, and gradually thickening. Prothorax strongly convex, narrowed anteriorly and forming a half circle about head, lateral margin narrowly reflexed, basal margin sinuate over scutellum; shining, very finely and rather densely punctate. Scutellum small and triangular. Elytra strongly convex, with rounded sides, shining, finely and rather densely punctate. Body beneath with short prosternum and mesosternum, the anterior coxal cavities open; legs short; posterior femora much enlarged, tibiae shaped as in the preceding two species. Length 3 to 3.3 mm., width 2.5 to 3 mm.

Type, male, and three paratypes, one male, 2 females, U. S. N.

M. Cat. No. 44792.

Type locality.—Cordoba, Vera Cruz, Mexico, collected in May.

1908, by Dr. A. Fenyes.

This species, the third of the genus known in this hemisphere, closely resembles the two species described in the preceding pages, but is different in coloring. The four specimens known are uniformly deep reddish brown without spots or other markings. The aedeagus, too, differs from those of the Florida and Cuban species.

Stoiba marginata, new species. Fig. 9, pl. IV.

Rounded, not shining, about 6.5 mm. long, with convex, coarsely punctate elytra and a wide, explanate, lateral margin on both prothorax and elytra; head, antennae, lateral margin, apex and sometimes all but base of femora, the tibiae, and the tarsi pale reddish yellow; middle of pronotum, and elytra, except narrow margin,

<sup>&</sup>lt;sup>6</sup> Bryant, Bull. Entomol. Research, vol. 12, p. 474, 1922.

deep blue black; under-surface black. Head pale yellow, withdrawn into prothorax and nearly invisible from above; a median vertical line down occiput, tubercles swollen, antennal sockets closely placed; carina not produced but lower portion of front under the antennae swollen on each side. Antennae not extending below prothorax, pale yellow, with first four joints subglabrous, the rest pubescent; third joint long, fourth and fifth shorter and approximately of equal length, thicker than third, and the succeeding ones gradually thickening. Prothorax narrowed anteriorly, with slightly emarginate anterior margin and with sinuate basal margin; sides widely explanate and pale reddish yellow; median area slightly convex and dark blue black; alutaceous, coarsely, and in some places densely, punctate, with trace of a median line. Scutellum triangular, black, shining. Elytra strongly convex, lateral margin at more than right angles with declivity of convex median portion and widely explanate in basal half; surface coarsely and densely punctate, the punctation becoming even coarser on lateral margin; deep blue black in color with narrow reddish yellow lateral margin; wings vestigial. Body beneath shining black; apex of femora (in one specimen all of femora except base), the tibiae, and the tarsi pale; claws with short, broad basal tooth. Length 6 to 7 mm., width 6 to 6.5 mm.

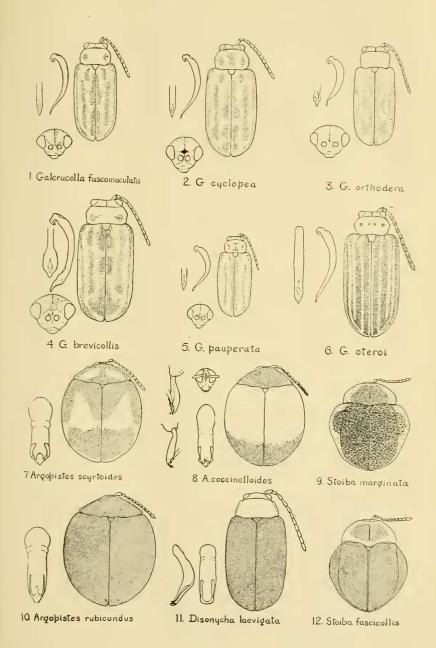
Type and one paratype, U. S. N. M. Cat. No. 44325.

Type locality.—Buenos Aires, elevation 2,350 to 2,800 ft., Trinidad Mts., Cuba, collected 4 May, 1932, by S. C. Bruner and A. Otero.

This species differs from related species of *Stoiba* with dark elytra in having a pale lateral margin and in being coarsely punctate. The elytral punctation is not so coarse as in the extremely coarsely punctate species of *Elytrogona*, but is coarser than in *S. decemmaculata* Blake. As in *S. decemmaculata* and *S. bruneri* Blake, the wings are vestigial. The antennae resemble those of *S. flavicollis* Klug and *S. indivisa* Blake in having the fifth antennal joint short, pubescent, and like the succeeding ones.

Stoiba fascicollis, new species. Fig. 12, pl. IV.

Rounded oval, about 8 mm. long, with explanate margin on both prothorax and elytra; not shining, alutaceous, distinctly punctate; elytra strongly convex; antennae, margin of prothorax, and legs, except at base, yellow; prothorax banded; elytra deep blue black, undersurface black. Head pale yellow, withdrawn into prothorax and barely visible from above; a median vertical line down occiput; frontal tubercles well marked, alutaceous, and punctate; antennal sockets closely placed. Antennae not reaching much beyond pro-



notum, pale yellow; first four joints subglabrous, third joint a little longer than fourth, fifth and remaining joints pubescent and gradually thickening. Prothorax narrowed anteriorly, with slightly emarginate anterior margin and sinuate basal margin; sides widely explanate; disc slightly convex and with wide dark band; surface alutaceous and with scattered coarse punctures and median line. Scutellum dark and shining. Elytra strongly convex, with margin spreading at an obtuse angle from declivity of convex median portion, and wider in basal half; distinctly punctate and alutaceous; blue black; wings fully developed. Body beneath shining black; legs, except at base, pale; claws with a short, broad basal tooth. Length 7.5 to 8.5 mm., width 6 to 6.8 mm.

Type, male, and one paratype, U. S. N. M. Cat. No. 44326.

Type locality.—Buenos Aires, elevation 2,350 to 2,800 ft., Trinidad Mts., Cuba, collected 4 May, 1932, by S. C. Bruner and A. Otero.

This appears to be a distinct species rather than a dark variety of *S. flavicollis* Klug, since the elytral punctation is a little denser and more distinct than in any form of that species, and the aedeagus is slightly wider. There are undoubtedly several forms or species confused under the name *S. flavicollis*, but no form has been described having a band across the pronotum.

A Change of Name in the Genus Rhagovelia (Hemiptera, Veliidae).—In a recent paper on the genus Rhagovelia (Annals Ent. Soc. Amer., Vol. 26, pp. 467–468, Sept., 1933), I described a new species from Perú, South America, under the name Rhagovelia hungerfordi. Since this article appeared, it has been called to my attention that Lundblad previously used hungerfordi for a variety of Rhagovelia femorata Dover from the East Indies region (Sonder-Abdruck aus dem Archiv für Hydrobiologie 1933. Suppl.-Bd. XII. Tropische Binnengewässer IV Seite 1–194, pp. 293–295, fig. 88). I therefore propose the new name Rhagovelia abrupta to replace R. hungerfordi Gould, 1933 (not of Lundblad, 1933).—George E. Gould, Purdue University Agricultural Experiment Station, Lafayette, Indiana.

An unusually early hatch.—While duck hunting on the Gila River about fifteen miles below the Coolidge Dam, on January 15, 1934, I noticed an unusually early and heavy hatch of *Libythea backmani* (Lepidoptera-Rhopalocera). This insect usually hatches from hackberry but there is no hackberry in this locality.—D. K. Duncan, Globe, Arizona.